

**SO414/(3-2-4)**  
**Oceanic and Atmospheric Processes**  
**Syllabus Fall 2002**

<b>DATE</b>	<b>TOPIC</b>	<b>READINGS</b>
19 Aug	Intro, Density	<u>1-30</u> , 1-11, 287-296, (1-6)
20 Aug	Density	
<u>21 Aug</u>	<i>Lab: Equation of State</i>	
22 Aug	Density	
26 Aug	Stability	<u>30-38</u> , <u>71-72</u> , <u>179-180</u> , 24-32
27 Aug	Stability	
<u>28 Aug</u>	<b><i>Homework 1 Review</i></b> , <i>Lab: Oceanic Static Stability</i>	
29 Aug	Stability	
02 Sep	<b>Holiday</b>	
03 Sep	Stability	
<u>04 Sep</u>	<b><i>Quiz 1</i></b> , <i>Lab: Atmospheric Static Stability</i>	
05 Sep	Continuity	<u>66-71</u> , <u>80-84</u> , 12-15, 16-24, 33-36, (43-47)
09 Sep	Continuity	
10 Sep	Coninuity	
<u>11 Sep</u>	<b><i>Homework 2 Review</i></b> , <i>Lab: Continuity</i>	
12 Sep	Pressure Gradient Acceleration	<u>84-86</u> , 36-37, (6-7)
16 Sep	Pressure Gradient Acceleration	
17 Sep	Apparent Accelerations	<u>87-96</u> , 37-43, (11-19)
<u>18 Sep</u>	<b><i>Quiz 2</i></b> , <i>Lab: Pressure Gradient Accel.</i>	
19 Sep	Apparent Accelerations	
23 Sep	Apparent Accelerations	
24 Sep	Apparent Accelerations	
<u>25 Sep</u>	<b><i>Homework 3 Review</i></b> , <i>Lab: Acceleration Balance in a Rotating Tank</i>	
26 Sep	Apparent Accelerations	
30 Sep	Friction	
01 Oct	Friction	
<u>02 Oct</u>	<b><i>Quiz 3</i></b> , <i>Lab: Acceleration Balance in the Atmosphere</i>	
03 Oct	Scale Analysis	54-62, (38-43)
07 Oct	Scale Analysis	
08 Oct	Scale Analysis	
<u>09 Oct</u>	<b><i>Homework 4 Review</i></b> ,	

10 Oct	Scale Analysis	
14 Oct	<b>Holiday</b>	
15 Oct	Geostrophy	<b>108-115</b> , 66-82, (40-41)
<u>16 Oct</u>	<b>Quiz 4,</b> <i>Lab: Scale Analysis</i>	
17 Oct	Geostrophy	
21 Oct	Geostrophy	
22 Oct	Geostrophy	
<u>23 Oct</u>	<b>Homework 5 Review,</b> <i>Lab: Oceanic Geostrophy</i>	
24 Oct	Baroclinicity, Barotropicity	<b>118</b> , 85-95, (77)
28 Oct	Thermal Wind	<b>116-117</b> , 82-85, (73-77)
29 Oct	Thermal Wind	
<u>30 Oct</u>	<b>Quiz 5,</b> Thermal Wind	
31 Oct	Thermal Wind	
04 Nov	Flow in a Curved Path	(61-69)
05 Nov	Flow in a Curved Path	
<u>06 Nov</u>	<b>Homework 6 Review,</b> <i>Lab: Thermal Wind</i>	
07 Nov	Flow in a Curved Path	
11 Nov	<b>Holiday</b>	
12 Nov	Flow in a Curved path	
<u>13 Nov</u>	<b>Quiz 6,</b> <i>Lab: Atmospheric Gradient Flow</i>	
14 Nov	Reynolds Equations	<b>96-105</b> , 44-53, (116-129)
18 Nov	Reynolds Equations	
19 Nov	Reynolds Equations	
<u>20 Nov</u>	<b>Homework 7 Review</b>	
21 Nov	Reynolds Equations	
25 Nov	Ekman Flow	<b>122-128</b> , 106-118, (129-139)
26 Nov	Ekman Flow	
<u>27 Nov</u>	<b>Quiz 7</b>	
28 Nov	<b>Holiday</b>	
02 Dec	Ekman Flow	
03 Dec	Ekman Flow	
<u>04 Dec</u>	Special Topics	
05 Dec	Review	
<b>TBA</b>	<b>FINAL EXAM</b>	

\*\*\*\*\*Readings in bold from Knauss, in italics from Pond and Pickard, and in parentheses from Holton